BRUHAT BANGALORE MAHANAGARA PALIKE

YALAHANKA ZONE ELECTRICAL DIVISION

Name of the Work:-Detailed Sub Estimate for Providing Electrification and Fixtures to Shadimahal Jakkur Layout in Ward No 07.

Budget Head .....

Division No..... Estimate No. ... For Rs. **345000.00**

Sl.No.	SR Page & SL No	Description of Work	Unit	Qty	Rate	Amount
1	2/1.2.2	Concealed Conduit System Supplying heavy gauge PVC conduit pipe .....mm dia .....mm thick confirming to IS 2509 with suitable size bends, metal/PVC junction boxes, adhesive paste etc., and running before concreting the slab. The conduit should be tied to the reinforcement rods by using binding wires and unused ways of junction boxes and pipe ends should be covered using PVC end enclosures, run with 18SWG GI fish wire wherever necessary 25mm dia 2mm thick	Mtrs	250	57.00	14250.00
2	2/1.3.2	Supplying heavy gauge PVC Conduit Pipe ....dia .....mm thick with suitable size bends, metal junction boxes adhesive paste etc., by groove cutting in the wall and fixing by bracing U or J hooks and cement plastering up to the wall surface and run with 18 SWG GI fish wire run throughout the conduit wherever necessary.25mm dia 2mm thick	Mtrs	150	58.00	8700.00
3	3/1.12	Supplying And Fixing Metal Fan Box with Round Hook.	No	25	92.00	2300.00
4	3.5.1	Supplying and flush mounting powder coated / galvanized metal box suitable for mounting modular switch plates. The box should be firmly flush mounted after due groove cutting in Brick/Stone/C.C wall 1-3Way	Nos	6	91.00	546.00
5	3	6 Way	Nos	3	121.00	363.00
6	4	8 Way	Nos	3	140.00	420.00
7	5	10-12 Way	Nos	3	159.00	477.00
8	3.5.6	16Way	Each	8	172.00	1376.00
9						
10	16/3.6.1	Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/PVC box. 1 to 3 Module	Nos	6	109.00	654.00
11	3.6.3	6 Module	Nos	3	173.00	519.00
12	3.6.4	8 Module	Nos	3	200.00	600.00
13	3.6.6	12 to16 Module	Nos	11	267.00	2937.00
14	16/3.7.B	Supplying and fixing of modular switch/ Socket/stepped electronic fan regulator/ dimmer/telephone socket etc on existing modular switch plate as per IS 3854 and IS 1293 GROUP B 6Amps one way switch.	Nos	63	63.00	3969.00
15	3.7.3	6Amps 3way socket.	Nos	20	95.00	1900.00
16	3.7.4	Stepped Fan Regulator.	Nos	20	286.00	5720.00

17	3.7.7	16Amps one way switch	Nos	10	114.00	1140.00
18	3.7.10	6/16Amps universal socket	Nos	10	147.00	1470.00
19	20/4.2	Supplying and fixing PBBC/Bakelite straight or slant batten holder and wiring with 60w/230 volts lamps.	Nos	25	88.00	2200.00
20	06/2.6.2	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper conductor single core wire in open or concealed system of wiring as per IS-694:1990 & confirming to GTP of GROUP - B.1.5 sqmm	Mtrs	350	15.90	5565.00
21	2.6.3	2.5 sqmm	Mtr.	250	24.90	6225.00
22	2.6.4	4 sqmm	Mtr.	250	36.30	9075.00
23	3.11	Extra for supplying 4mm thick white plastic plate and covering for junction boxes of size .....mm conduit using necessary machine screws.80mm	Nos	25	9.00	225.00
24	06/2.4.1	Point wiring using Copper wire without switch. Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 1100V grade, COPPER conductor flexible multistrand FRLS PVC insulated, 2X1.5Sq.mm Cable confirming to the GTP without switch, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block complete for each outlet.GROUP BShort point upto 3Mtr from tapping point to out let via switch box	Points	8	130.00	1040.00
25	2.4.2	Medium point above 3Mtr upto 6Mtr from tapping point to out let via switch box	Point	25	190.00	4750.00
26	2.4.3	Long point above 6Mtr upto 10Mtr from tapping point to out let via switch box	Point	35	291.00	10185.00
27	47/6.17.II.5	Supplying and fixing regular MCB distribution boards on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase / 3 phase / single door with powder coated painting. Made out of 14 SWG MS enclosure.II - Double Door 08Way SP &N	Nos	1	1299.00	1299.00
28	6.17.II.6	12Way SP &N	Nos	1	1622.00	1622.00
29	6.16.6	40-63Amps TPN	Nos	2	1936.00	3872.00
30	47/6.16.3	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. 5-32 Amps SP	Nos	4	418.00	1672.00
31	6.16.4	5-32 Amps DP		6	849.00	5094.00
32	25/4.29.2	LED Indoor Supplying of 2' feet - LED PVC Square Batten ..W with high quality diffuser with Life of 25000 burning hours & 70% lumen maintenance with CRI > 80. Power Input: 220-240V @ 50Hz & Power factor >0.9 along with CE approved drivers. 5 years Warranty against any manufacturing defect working under standard electrical condition LED light fighting 4' - 28 watts		12	1774.00	21288.00

	78/9.2.1	Supplying of 1440rpm heavy duty exhaust fan with bracket blades suitable to operate on 230V 50Hz, AC Supply complete.12" Sweep (300mm)	No	1	3654.00	3654.00
4	9.3.1	Supplying capacitor type ceiling fan complete with down rod blades, shackle, canopies etc., for operation on 230 volts, 50 cycles. Single phase AC supply conforming to ISS-374-1979 and with double ball bearing system. 48" Sweep (1200mm) Regular model	Nos	15	2376.00	35640.00
35	108/17.7.1	Fixing all types and all capacities of fluorescent / false ceiling / spot light / CFL / LED fittings indoor on the wall / ceiling / rafters / girders using 23/0.0076" twin twisted PVC insulated wires, required Nos of round blocks and clamps.On wall / ceiling / Rafter / Girders	Nos	24	98.00	2352.00
36	17.8	Fixing a ceiling / Wall mounting fan of all capacities and all types to the existing 'S' hook with fan regulator to the existing board together with supplying and fixing 5 amps. ceiling rose, necessary length of 23 / 0.0076 inch PVC insulated twin twisted copper wire and wiring.	Each	15	139.00	2085.00
37	56/7.4.6	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A.3.5 core 35 sqmm	Mtrs	35	204.00	7140.00
38	61/7.8.2	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.On wall /Structure. 25 sqmm to 75 sqmm	Mtrs	35	16.20	567.00
39	62/7.12.1	Supplying and fixing of class A (medium duty) GI pipe of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV.40mm	Mtrs	6	345.00	2070.00
40	7.13.4	Supplying and fixing L.T. cast Iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers etc.35Sqmm	Nos	1	362.00	362.00
41	49/6.40.2	Fabricating supplying and mounting MS box made out ... SWG suitable for floor / wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished with 2 coats of red oxide primer paint and finally finished with approved colour enameled metal paint etc., complete.16SWG	Sqcms	40800	0.33	13464.00

42	55/7.2	Supplying fixing and wiring earth electrode for grounding of lifts, transformers, DG sets etc. using 40mm dia 2.9mm thick 2.5 mtr long GI pipe with GI funnel with mesh and suitable size reducer fixed on the top of the earth electrode. The funnel should be enclosed in a CC chamber of 400x400x400mm with a cast iron cover. The earth electrode shall have staggered holes of 12mm dia and the electrode should be covered 150mm all-round with alternate layers of salt and charcoal from the bottom of the CC chamber. The connection from the electrode is to be established through GI strip using GI bolts and nuts.	No	2	4317.00	8634.00
43	27/4.36.1	LED Street light. Supply of LED Streetlight with pressure die cast aluminum housing body with optimal heat sink for better thermal dissipation. Diffuser with Injection moulded & is made of polycarbonate material with high transmission index, delivering superior light output. Rated life Burning Hrs. 50000 hr. @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment & impact resistance of complete luminaire > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1A to 0.7A & Surge Protection- Min 4 KV along with Over voltage/Overload, short circuit/ miswiring protection. Compatible for pole mounting with outer dia of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & Short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools.LED Light fixture with .....W System Power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI 75+. housing with supplier word mark / name shall be engraved / Embossing on the die cast housing / body part. . Luminaire manufacturer should have in-house facility accredited by NABL/CPRI & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Warranty of 5 Years against any manufacturing defect working under standard electrical conditions as mentioned above should be given by LED source manufacturer. Suitable for A1/A2 Roads as per IS 1944 Part I & Part II.90 Watts	Nos	3	31250.00	93750.00
44	44/6.7.6	Supplying & fixing of Porcelain fuse channel with cut out on existing wooden/panel using necessary nuts, bolts and washers.63Amps	Nos	3	234.00	702.00
45	47/6.38.1	Supplying ..... amps rated 3phase with neutral bus bar using required capacity electrolytic aluminum strips covered with heat shrinkable coloured PVC sleeve, mounted on phenolic/FRP/DMC insulator which are mounted on powder coated 40x6mm M.S.flat frame work in existing panel board. The bus bar shall have suitable holes for termination of incoming and outgoing cables as per IS specification with necessary bolts, nuts and washers etc., complete.100Amps 4x30x6mm Aluminum Strips	Mtrs	0.50	2135.00	1067.50

	27/4.2 9.2	LED Indoor Supplying of 2' feet - LED PVC Square Batten ..W with high quality diffuser with Life of 25000 burning hours & 70% lumen maintenance with CRI > 80. Power Input: 220-240V @ 50Hz & Power factor >0.9 along with CE approved drivers. 5 years Warranty against any manufacturing defect working under standard electrical condition. LED light fighting 4' - 28 watts	Nos	24	1774.00	42576.00
47		BEScom Charges				9483.50
		Total Rs				**345000.00**

CERTIFICATE

1. The Place was inspected and work is essential
2. The Provision made in the estimate is adequate and are necessary.
3. The Work comes in the BBMP limit and is legitimate charges on the Corporation Funds.
4. The rates in the Estimate is based on PWD (Elec) SR of 2014-15 .

Jr/Asst. Engineer (Elec)

Asst. Exe.Engineer (Elec)
Dasarahalli zone
Bruhat Bangalore Mahanagara Palike

EXECUTIVE ENGINEER (ELEC)
DASARAHALLI ZONE
BRUHAT BANGALORE MAHANAGARA PALIKE

TECHNICALLY SANCTIONED FOR Rs. 3.45 lakh
Rupees Three lakh Fourty Five Thousand only
Under P2172 Hon Dy mayor
Registered as EE( ) No. 30/18-19
Subject to conditions contained in
enclosed note EE( ) No. BBMP/CE/42/28/96/17-18
Dt. 29-8-17
Estimate Al Sanctioned
BBMP/EE/ELE/42/TS/30/18-19
Dated 29-10-18 Rs. 3,45,000/-
Executive Engineer